

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,049	05/05/2001	David Walter Smith	PRIM-020	9063
75	90 08/16/2006		EXAM	INER
George Liu			ALIE, GHASSEM	
Lawrence Y D I	Ho & Assocs.		<u></u>	
2101 Crystal Plaza Arc			ART UNIT	PAPER NUMBER
PMB 400			3724	
Arlington, VA 22202			DATE MAILED: 08/16/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

			80
	Application No.	Applicant(s)	
	09/849,049	SMITH ET AL.	
Office Action Summary	Examiner	Art Unit	
	Ghassem Alie	3724	
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet wi	th the correspondence address	S
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION (I.136(a). In no event, however, may a red will apply and will expire SIX (6) MON (Ite, cause the application to become AE)	CATION. eply be timely filed THS from the mailing date of this commun	
Status			
1) Responsive to communication(s) filed on 13	December 2005.		
2a) This action is <b>FINAL</b> . 2b) Th	is action is non-final.		
3) Since this application is in condition for allow	•	• •	rits is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-17 is/are pending in the application	on.		
4a) Of the above claim(s) is/are withdr	rawn from consideration.		
5) Claim(s) is/are allowed.			
6) Claim(s) is/are rejected.			
7) Claim(s) is/are objected to.	r clastian requirement		
8)⊠ Claim(s) <u>1-17</u> are subject to restriction and/o	r election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examin	ner.		
10) ☐ The drawing(s) filed on is/are: a) ☐ ac			
Applicant may not request that any objection to the			40470
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	•		
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in A iority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Stag	je
Attachment(s)  1) Notice of References Cited (PTO-892)		Summary (PTO-413) s)/Mail Date	
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date</li> </ul>		nformal Patent Application (PTO-152)	)

Art Unit: 3724

## Election/Restrictions

Page 2

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7, drawn to a cutting system for use in singulation of substrates, classified in class 125 subclass 13.1.
- II. Claims 8-11, drawn to a cutting system for singulating semiconductor devices from a substrate, classified in class 125, subclass 14.
- III. Claims 12-16, drawn to a method for bi-directionally sawing a substrate classified in class 83, subclass 13.
- VI. Claim 17, drawn to a system for singulating substrate semiconductor devices from a substrate, 83, subclass 863.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions III and I are related as process and apparatus for its practice.

  The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

  (MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another materially different apparatus that does not include a first and second transport means arranged parallel to each other and a first carrier support having a first linear actuator.
- 3. Inventions III and II are related as process and apparatus for its practice.

  The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the

Art Unit: 3724

apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another materially different apparatus that does not include a transport means having front and rear linear actuators and a rear substrate carrier support coupled to the linear actuator.

- 4. Inventions III and IV are related as process and apparatus for its practice.

  The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

  (MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another materially different apparatus that does not include means for independently controlling the theta or Z-motion of each of the support carriers and substrate carrier so large that they will not pass each other in a Y-axis direction.
- 5. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. For example, invention I has a separate utility such as it could be used without the saw blades mounted on a movable frame positioned above the substrate and transport means mounted on a base below the saw blades set forth in invention II. Conversely; invention II has a separate utility such as it could be used without the means for positioning the first carrier support and the second carrier support and singulation/cutting means that cuts the substrate /wafer on the first/second carrier support on the first/second linear transport means when the loading /unloading and positioning the

substrate /wafer on the second/first carrier support ready for cutting on the second/first linear transport means set forth in invention I. See MPEP § 806.05(d).

- 6. Inventions I and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. For example, invention I has a separate utility such as it could be used without the means for independently controlling the theta or Z-motion of each of the support carriers and substrate carrier so large that they will not pass each other in a Y-axis direction set forth in invention VI. Conversely; invention VI has a separate utility such as it could be used without first and second linear carrier transport means arranged parallel to each other and each having a linear actuator set forth in invention I. See MPEP § 806.05(d).
- 7. Inventions II and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. For example, invention II has a separate utility such as it could be used without the means for independently controlling the theta or Z-motion of each of the support carriers and substrate carrier so large that they will not pass each other in a Y-axis direction set forth in invention VI. Conversely; invention VI has a separate utility such as it could be used without first and second linear carrier transport means arranged parallel to each other and each having a linear actuator set forth in invention II. See MPEP § 806.05(d).
- 8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for

Art Unit: 3724

examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their divergent subject matter, restriction for examination purpose as indicated is proper.

Page 5

- 9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor or at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 10. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR. 1.143).
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

Art Unit: 3724

Page 6

about the PAIR system, SEE <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA/ga

August 10, 2006

BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER